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4,225,407

Wagener et al.

[45] **Sep. 30, 1980**

[54]		C ELECTRODEPOSITION OF S ONTO A CONDUCTIVE				
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[21]	Appl. No.:	26,720				
[22]	Filed:	Apr. 4, 1979				
Related U.S. Application Data						
[63]	[63] Continuation-in-part of Ser. No. 569,715, Apr. 21, 1975, abandoned, which is a continuation-in-part of Ser. No. 392,699, Aug. 29, 1973, abandoned.					
[51] [52]		C25D 13/06; C25D 13/10 204/181 C				
[58]	Field of Sea	rch 204/181 C				
[56] References Cited						
U.S. PATENT DOCUMENTS						
2 45		59 Smith et al 204/181 C				

3,567,613	3/1971	Kraus et al	204/181 C	3
3,645,872	2/1972	Weigel	204/181 C	3

FOREIGN PATENT DOCUMENTS

1303480 1/1973 United Kingdom .

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[57] ABSTRACT

A method for electrodeposition of an organic material on an electroconductive surface comprising placing the electroconductive surface to be coated in contact with an aqueous dispersion containing a water-insoluble, essentially electrically nonconductive, film-forming, organic polymer as cation-active particles wherein the cation-activity is provided at least predominantly by reducible nitrogen-containing cations and passing an electric current from an electrode through the latex to the electroconductive surface in such a direction that the electroconductive surface is negatively charged, i.e., becomes a cathode in an electrophoretic cell. By use of alternating current, both electrodes become coated with an adherent coating of polymer.

15 Claims, No Drawings